

United States Environmental Protection Agency
Region VI
POLLUTION REPORT

REDACTED VERSION

Date: Friday, July 18, 2008

From: Roberto Bernier

To: Debbie Dietrich, Office of Emergency Management
Ragan Broyles, Superfund Division

Subject: POLREP 6 of 6

Clute Texas Mercury Response

(b) (6) Clute, TX

Latitude: (b) (6)

Longitude: (b) (6)

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|--------------------------|------------|----------------------------|----------------|
| POLREP No.: | 6 | Site #: | A6H7 |
| Reporting Period: | | D.O. #: | 11 |
| Start Date: | 7/3/2008 | Response Authority: | CERCLA |
| Mob Date: | 7/3/2008 | Response Type: | Emergency |
| Demob Date: | | NPL Status: | |
| Completion Date: | 10/31/2008 | Incident Category: | Removal Action |
| CERCLIS ID #: | | Contract # | EP-S6-07-02 |
| RCRIS ID #: | | | |

Site Description

On June 28, 2008, local authorities reported to the National Response Center (NRC No. 875602) that 3 private residences had been affected with approximately 6 pounds of mercury. A child found the mercury contained in a jar and played with it at his residence. Some of the mercury was transferred to two additional properties by neighbor kids that also handled the mercury. On June 19, 2008, local emergency response teams responded to 2 of the houses, removed elemental mercury and contaminated items and declared them remediated. The local teams responded to the source-house and removed the remaining mercury, a section of carpet from the front bedroom, and some soil at the house front yard; however, operations were suspended due to lack of funding. On July 3, 2008, EPA mobilized its Superfund Technical Assistance and Response Team (START-3) contractors to the incident location to assess the situation and perform analytical screening of the source-house for mercury vapors. The residence was secured by the local authorities and the occupants of the house were relocated with relatives.

Current Activities

On 16 July 2008, EPA continued procedures to screen and decontaminate personal effects, to screen inside the house to locate mercury hot spots, and to cleanup the mercury spill. The concentrations of mercury vapor in the Bathroom and Bedroom 2 (after heating and venting) at four-feet in height was below the EPA action level. Then mercury vapor concentration increased in all interior rooms since vapors from the area of mercury-affected soil found in the front yard are affecting the interior of the house. Mercon-X solution was applied to the front porch to lower the levels of mercury vapor and then vacuumed. Additional mercury was recovered from area of mercury-affected soil and from a flower planter. The area of mercury-affected soil, which is approximately 6'x6'x6", was excavated and then heated with utility heat lamps to volatilize and vent mercury vapors. Mercon-X gel was added to the drains and plumbing associated with the bathroom sink, shower, kitchen sink, dishwasher, and washing machine to reduce mercury vapors. Caulking was applied to additional seams along the Living Room and Hallway floor. Heating and venting cycles continue to the interior of the house. The Living Room was heated and closed for screening to occur the following morning.

On 17 July 2008, EPA continued to apply heating and venting cycles to the interior of the house. After the initial morning screening, the Living Room, Hallway, and Bedroom exhibited a decrease in mercury vapor concentration; however, the levels were above the EPA cleanup standard. The Bathroom, Bedroom 2, Kitchen, Dining Room, Den, and Laundry Room exhibited mercury vapor concentrations below the EPA cleanup standard; however, the levels increased from the previous day. The front concrete porch was treated again to suppress mercury vapor, vacuumed, and covered with poly liner. Hg-X solution was applied to the mercury-affected excavated area and let it react to specifications. Later, Mercon-X gel was applied to the same area. Plumbing previously treated with Mercon-X was flushed with water and retreated with an additional application of Mercon-X gel. The sewage clean-out was located in the

backyard and treated with Mercon-X gel. Caulking was applied to additional seams along the floors and walls of Bedroom 1 and the Living Room. The house was heated and closed overnight for screening the following morning.

On 18 July 2008, EPA screened the interior of the house for mercury vapor. Each of the interior rooms exhibited mercury concentrations above the cleanup standard. Treatments applied to the mercury-affected excavation decreased the concentration of mercury vapor detected (in the excavation); however an additional treatment of Mercon-X gel was applied. EPA applied additional caulking to specific locations in Bedroom 1 and the Living Room. The drains were flushed again with water to enhance the effectiveness of treatment. EPA demobilized in the afternoon for a period of one week in order to allow additional time for the mercury-affected house and excavated area to ventilate. EPA coordinated with the local Emergency Management Department and reached an agreement for them to heat and vent the house daily during the one week demobilization period.

Planned Removal Actions

Continue the removal of elemental mercury and mercury vapors, in specific, from the affected area located outside the house (beside the front porch). Continue heating and venting.

Next Steps

EPA will resume removal and remediation activities on 28 July 2008. Upon completion of removal and remediation activities, EPA will conduct confirmation air sampling inside the house to confirm that mercury vapor concentrations are below the EPA cleanup standard.

Key Issues

Continue to maintain best management practices to prevent cross-contamination of mercury into areas of lesser mercury vapor concentration. Continue monitoring for heat stress, a significant health and safety factor at this site. Ventilation of the house and excavation will aid removal and remediation efforts.

Estimated Costs *

| | Budgeted | Total To Date | Remaining | % Remaining |
|-------------------------|-----------------|----------------------|------------------|--------------------|
| Extramural Costs | | | | |
| Intramural Costs | | | | |
| | | | | |
| Total Site Costs | \$0.00 | \$0.00 | \$0.00 | 0.00% |

* The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The OSC does not necessarily receive specific figures on final payments made to any contractor(s). Other financial data which the OSC must rely upon may not be entirely up-to-date. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

response.epa.gov/clutemercury